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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,303	11/19/2003	James Economy	ILL09-030-US	6472
43320 EVAN LAW G	7590 07/09/2007 GROUP LLC	EXAMINER		
600 WEST JAC	CKSON BLVD., SUITE 6	DANIELS, MATTHEW J		
CHICAGO, IL 60661			ART UNIT	PAPER NUMBER
			1732	
			MAIL DATE	DELIVERY MODE
			07/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)
10/717,303	ECONOMY ET AL.
Examiner	Art Unit
Matthew J. Daniels	1732

	Matthew J. Daniels	1732	
The MAILING DATE of this communication appe	ars on the cover sheet with the c	correspondence add	ress
THE REPLY FILED <u>07 June 2007</u> FAILS TO PLACE THIS APP	LICATION IN CONDITION FOR A	LLOWANCE.	
1.  The reply was filed after a final rejection, but prior to or on this application, applicant must timely file one of the follow places the application in condition for allowance; (2) a No a Request for Continued Examination (RCE) in compliance time periods:	ving replies: (1) an amendment, aft tice of Appeal (with appeal fee) in o e with 37 CFR 1.114. The reply m	fidavit, or other eviden compliance with 37 Cl	ce, which FR 41.31; or (3)
a) $\boxtimes$ The period for reply expires $\underline{3}$ months from the mailing date	•		
b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or (TWO MONTHS OF THE FINAL REJECTION. See MPEP 7)	ater than SIX MONTHS from the mailin (b). ONLY CHECK BOX (b) WHEN THE	g date of the final rejecti	on.
Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filed is the date for purposes of determining the period of extender 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office later may reduce any earned patent term adjustment. See 37 CFR 1.704(b)	tension and the corresponding amount shortened statutory period for reply orig than three months after the mailing da	of the fee. The appropri inally set in the final Office	ate extension fee ce action; or (2) as
NOTICE OF APPEAL  2. The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any external Notice of Appeal has been filed, any reply must be filed	nsion thereof (37 CFR 41.37(e)), to	avoid dismissal of th	
AMENDMENTS  3. The proposed amendment(s) filed after a final rejection, it	but prior to the date of filing a brief	will not be entered by	acause.
(a) They raise new issues that would require further collision (b) They raise the issue of new matter (see NOTE belo (c) They are not deemed to place the application in bet appeal; and/or  (d) They present additional claims without canceling a NOTE: (See 37 CFR 1.116 and 41.33(a)).  4. The amendments are not in compliance with 37 CFR 1.15. Applicant's reply has overcome the following rejection(s). Newly proposed or amended claim(s) would be all	nsideration and/or search (see NO w); ter form for appeal by materially re corresponding number of finally rej 21. See attached Notice of Non-Co :	TE below); ducing or simplifying ected claims. empliant Amendment	the issues for (PTOL-324).
non-allowable claim(s).  7. For purposes of appeal, the proposed amendment(s): a) how the new or amended claims would be rejected is provided that the status of the claim(s) is (or will be) as follows:	☐ will not be entered, or b) 🛭 wi	•	
Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: <u>1-3,5-13,18-22,24,28,30,31,38 and 39</u> . Claim(s) withdrawn from consideration:			
AFFIDAVIT OR OTHER EVIDENCE  8. ☐ The affidavit or other evidence filed after a final action, bu because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).	d sufficient reasons why the affiday	vit or other evidence is	necessary and
<ol> <li>The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to of showing a good and sufficient reasons why it is necessar</li> <li>The affidavit or other evidence is entered. An explanation</li> </ol>	overcome <u>all</u> rejections under appe y and was not earlier presented. S	al and/or appellant fai see 37 CFR 41.33(d)(1	ls to provide a
REQUEST FOR RECONSIDERATION/OTHER	ii oi tile status oi tile ciaillis altei e	illy is below or allaci	ieu.
11.   The request for reconsideration has been considered bu See the enclosed response to arguments.	t does NOT place the application i	n condition for allowar	nce because:
12. ☐ Note the attached Information Disclosure Statement(s).  13. ☐ Other:	(PTO/SB/08) Paper No(s).		

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## Response to Arguments

Applicant's arguments filed 7 June 2007 have been fully considered but they are not persuasive. The arguments appear to be on the following grounds:

- a) Economy describes a maximum density for C/BN composites of 1.61 g/cc; density is a property of the composites which Economy seeks to maximize.
- b) Spain does not describe C/BN composites or their densities.
- c) The fact that a carbon matrix (of Johnson) is characterized by a certain density would hardly enable one of ordinary skill in the art to reach the conclusion that a boron matrix material of a different composition would also be characterized by the same density.

## These arguments are not persuasive for the following reasons:

a,b,c) In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With regard to the statement that "density is a property of the composites which Economy et al. seeks to maximize" (Remarks, page 3, first sentence), the Examiner agrees. It is submitted that this suggestion would guide one to produce composites having a higher density, as claimed. One method of doing so known to Economy was repeated impregnation (Col. 5). For example, Economy increased the density to 1.61 g/cc (5:45) using two impregnation steps. Economy also discloses also that repeated infiltrations were attempted. In this case, where the impregnation process was carried out four times (Example 8), a density of 1.62 was achieved. It

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is submitted that it has not been established that the claimed density, which varies from the density disclosed by the reference by less than 1%, is achieved by a method step not suggested by or obvious over the method of Economy.

However, in the alternative that a needled composite rather than chopped fiber results in the increased density, then Johnson applies for the teaching of needlepunching. In combination with the method of Economy, and in view of Economy's teaching and suggestion of repeated impregnation, the resulting density also appears to be obvious over the combination. It is noted that graphite and boron nitride are similar in density, and therefore it is submitted that teachings about density pertaining to carbon and graphite are also applicable for their suggestions regarding boron nitride.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MJD 7/3/07